

IGOR LANDAIS, PHD

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RESEARCH ASSISTANT PROFESSOR

Translational Research, Oncology

KEY COMPETENCIES

- Highly trained and versatile scientific professional with 12 years of research experience.
- Strong record of achievement in assay development, cancer and molecular biology research.
- Demonstrated ability to drive project development and meet progress targets using innovative approaches.
- Excellent record of reviewing, publishing, patenting and presenting scientific data.
- Proven history of establishing collaborations with internal and external resources.
- Team player with strong communication, organizational and multitasking skills.
- Experience in lab management.
- Recognized talent for teaching and mentoring.

PROFESSIONAL EXPERIENCE

OREGON HEALTH & SCIENCE UNIVERSITY

PORTLAND, OR

2008-PRESENT

RESEARCH ASSISTANT PROFESSOR – Hoatlin Laboratory – Knight Cancer Institute.

Assay development, targeted cancer therapeutics.

- Designed and submitted a 5 years/\$1.9M project development plan (co-investigator, pending R01 grant).
- Identified and validated 3 potential lead chemicals for anticancer activity in preclinical setting.
- Expanded the readout of the in-house drug screening assay to develop a multiplex platform.
- Designed and developed a fluorogenic probe-based assay to evaluate proteasome activity in *Xenopus* egg extracts.
- Published 2 peer-reviewed article.
- Reviewed manuscripts for reputable scientific journals.
- Managed a lab of 6 people.
- Mentored 5 junior lab members.

OREGON HEALTH & SCIENCE UNIVERSITY

PORTLAND, OR

2006-2008

POSTDOCTORAL FELLOW – Hoatlin Laboratory – Knight Cancer Institute.

Assay development, targeted cancer therapeutics.

- Developed an innovative drug screening platform based on *Xenopus* egg extracts to identify novel classes of anticancer drugs.
- Filed one patent.
- Screened 2000+ compounds from targeted libraries.
- Optimized active compounds in collaboration with US and international chemists.
- Published one peer-reviewed article and designed the journal cover page.
- Supervised 1 summer intern.

OREGON HEALTH & SCIENCE UNIVERSITY

PORTLAND, OR

2003-2006

POSTDOCTORAL FELLOW – Lu Laboratory – Department of Biochemistry and Molecular Biology.

Regulation of the stability of the transcription elongation factor SSRP1.

- Designed, got IRB approval and launched a clinical study in collaboration with the OHSU Rheumatology Clinic to investigate SSRP1 fragments as early serum biomarkers in Systemic Lupus Erythematosus.
- Developed 13 high-quality monoclonal mouse antibodies against human SSRP1.
- Elucidated the 2-steps inactivation of SSRP1 during apoptosis.
- Mapped SSRP1 regions required for chromatin recruitment during transcription by qChIP analysis.
- Published 2 peer-reviewed articles.

INRA-CNRS-UNIVERSITÉ MONTPELLIER II

ST CHRISTOL LES ALÈS, FRANCE

1999-2002

DOCTORAL STUDENT – Cerutti Laboratory – Station de Pathologie Comparée.

Biological control of the multicrop pest moth Spodoptera frugiperda by the baculovirus agent AcMNPV.

- Identified a novel mechanism of transcription regulation in the early steps of baculovirus infection.
- Initiated a large-scale effort toward the genomic analysis of *S. frugiperda* in an international collaborative environment (Spodobase, <http://bioweb.ensam.inra.fr/spodobase>).
- Identified, deposited in Genbank and performed bioinformatics analysis on 86 *S. frugiperda* genes.
- Published 5 peer-reviewed articles.
- Supervised two students.
- Taught advanced Molecular Biology classes to INRA scientific staff.

INRA-CNRS

ANTIBES, FRANCE

1998

M.S. STUDENT – Vanlerberghe Laboratory – Laboratoire de Biologie des Invertébrés

Assay development, molecular identification of the biological pest control wasp Trichogramma brassicae.

- Identified a highly repeated, species-specific satellite DNA in *T. brassicae* genome.
- Used this information to design a specific and sensitive assay for the identification of *T. brassicae*.
- Published one peer-reviewed article.

LYCÉE PIERRE DE FERMAT

TOULOUSE, FRANCE

1996-1997

HIGH SCHOOL TEACHER (BIOLOGY)

In charge of 2 classes, 10th and 11th grades, 36 pupils each.

- Designed and conducted lectures, lab work and tests/evaluations.
- Constantly interacted with colleagues, high school administration and parents for smooth operation.

E D U C A T I O N

PH.D.

1999-2002

Station de Pathologie Comparée, INRA – CNRS – Université Montpellier II, St Christol les Alès, France.

M.S. PARASITOLOGY

1998

Laboratoire de Biologie des Invertébrés, INRA, Antibes, France.

AGRÉGATION DE SCIENCES NATURELLES

1996

France's highest national teaching certification.

C A R E E R D E V E L O P M E N T

ADVANCED TRAINING

- Lab2Market Entrepreneurship Academy, Portland State University, OR. 2008
Evaluated the potential of the Xenopus screening platform to attract Venture Capital funds.
- Advanced Cancer Biology Course, Oregon Health and Science University, OR. 2007

GRANTS AND AWARDS

- R01 "Small Molecule Modulation of the Fanconi Anemia Tumor Suppressor Pathway" *pending*
- NIH-NRSA Cancer Biology training grant. 2006-2008
- Eli Lilly-AACR scholar-in-training award. 2007
- American Society of Virology travel award. 2001
- Ph.D. training grant, French Department of Research and Technology. 1999-2002

PATENTS

- **Landais, I.** Cell-free screening assay and methods of use. Publication number #WO 2007/067261 A1.

INVITED PEER-REVIEWING

- J. Microbiol., BMC Genomics, Adv. Bioscience. 2005-2009

P U B L I C A T I O N S

1. **Landais I**, Li Y, Kumari A, Lu H. SSRP1 recruitment to genes undergoing transcription depends on the DNA-binding activity of its HMG-1 box. Submitted.
2. **Landais I**, Hiddingh S, McCarroll M, Sun A, Turker MS, Snyder JP, Hoatlin ME (2009) Monoketone analogs of curcumin, a new class of Fanconi anemia pathway inhibitors. *Molecular Cancer* 18:133
3. **Landais I**, Sobeck A, Stone S, LaChapelle A, Hoatlin ME (2009) A novel cell-free screen identifies a potent inhibitor of the Fanconi anemia pathway. *Int J Cancer* 124:783-92.
4. Sobeck A, Stone S, **Landais I**, de Graaf B, Hoatlin ME (2009) The Fanconi anemia protein FANCM is controlled by FANCD2 and the ATR/ATM pathways. *J Biol Chem* 284: 25560-8.
5. Li Y, Zeng SX, **Landais I**, Lu H (2007) Human SSRP1 has Spt16-dependent and independent roles in gene transcription. *J Biol Chem* 282: 6936-45.
6. **Landais I**, Lee H, Lu H (2006) Coupling caspase cleavage and ubiquitin-proteasome-dependent degradation of SSRP1 during apoptosis. *Cell Death Differ* 13: 1866-78.
7. **Landais I**, Vincent R, Bouton M, Devauchelle G, Duonor-Cerutti M, Ogliastro M (2006) Functional analysis of evolutionary conserved clustering of bZIP binding sites in the baculovirus homologous regions (hrs) suggests a cooperativity between host and viral transcription factors. *Virology* 344: 421-31.
8. Serrano-Pinto V, **Landais I**, Ogliastro MH, Gutierrez-Ayala M, Mejia-Ruiz H, Villarreal-Colmenares H, Garcia-Gasca A, Vazquez-Boucard C (2004) Vitellogenin mRNA expression in *Cherax quadricarinatus* during secondary vitellogenic at first maturation females. *Mol Reprod Dev* 69: 17-21.
9. **Landais I**, Ogliastro M, Mita K, Nohata J, Lopez-Ferber M, Duonor-Cerutti M, Shimada T, Fournier P, Devauchelle G (2003) Annotation pattern of ESTs from *Spodoptera frugiperda* Sf9 cells and analysis of the ribosomal protein genes reveal insect-specific features and unexpectedly low codon usage bias. *Bioinformatics* 19: 2343-50.
10. Volkoff AN, Rocher J, d'Alencon E, Bouton M, **Landais I**, Quesada-Moraga E, Vey A, Fournier P, Mita K, Devauchelle G (2003) Characterization and transcriptional profiles of three *Spodoptera frugiperda* genes encoding cysteine-rich peptides. A new class of defensin-like genes from lepidopteran insects? *Gene* 319: 43-53.
11. **Landais I**, Pomet J, Mita K, Nohata J, Gimenez S, Fournier P, Devauchelle G, Duonor-Cerutti M, Ogliastro M (2001) Characterization of the cDNA encoding the 90 kDa heat-shock protein in the Lepidoptera *Bombyx mori* and *Spodoptera frugiperda*. *Gene* 271: 223-31.
12. **Landais I**, Chavigny P, Castagnone C, Pizzol J, Abad P, Vanlerberghe-Masutti F (2000) Characterization of a highly conserved satellite DNA from the parasitoid wasp *Trichogramma brassicae*. *Gene* 255: 65-73.

S E L E C T E D P R E S E N T A T I O N S

1. **Landais I**, McCarroll MN, Sun A, Turker M, Lloyd RS, Snyder JP, Hoatlin ME. Identification of Potent Inhibitors of the Fanconi Anemia Pathway Using a Novel Cell-Free Assay. Poster, 100th AACR Annual meeting, April 2009, Denver, USA.
2. **Landais I**, McCarroll MN, Sun A, Turker M, Lloyd RS, Snyder JP, Hoatlin ME. Identification of Potent Inhibitors of the Fanconi Anemia Pathway Using a Novel Cell-Free Assay. Platform presentation, Keystone Symposium on Targeted Cancer Therapies, March 2009, Whistler, Canada.
3. **Landais I**, McCarroll MN, Sun A, Turker M, Lloyd RS, Snyder JP, Hoatlin ME. Identification of Potent Inhibitors of the Fanconi Anemia Pathway Using a Novel Cell-Free Assay. Poster, Keystone Symposium on Genomic Instability and DNA Repair, March 2009, Taos, USA.
4. **Landais I**, Sobeck A, Stone S, Sun A, Snyder JP, Hoatlin ME. Characterization of the curcumin analog EF24, a potent inhibitor of the Fanconi anemia pathway. Platform presentation, 20th Annual Fanconi anemia Research Fund Scientific Symposium, October 2008, Eugene, USA.
5. **Landais I**. XenAssay, a patented technology to identify novel classes of anticancer drugs. Platform presentation, Lab2Market Entrepreneurship Academy, September 2008, Portland, USA.
6. **Landais I**, Sobeck A, Stone S, LaChapelle A, Padhye S, Snyder J, Hoatlin ME. A novel cell-free screen for drugs that modulate the human Fanconi/breast cancer susceptibility protein network. Poster, AACR-NCI-EORTC Molecular targets and Cancer Therapeutics International Conference, October 2007, San Francisco, USA.
7. **Landais I**, Pomet JM, Mita K, Nohata J, Gimenez S, Fournier P, Devauchelle G, Duonor-Cerutti M, Ogliastro M. Characterization of the cDNA encoding the 90 kDa heat-shock protein in the Lepidoptera *Bombyx mori* and *Spodoptera frugiperda*. Platform presentation, Fifth International Workshop on Molecular Biology and Genetics of the Lepidoptera, August 2001, Kolympari, Greece.
8. **Landais I**, Vincent R, Robert L, Galibert L, Devauchelle G, Duonor-Cerutti M, Ogliastro M. Cooperativity between the baculovirus IE1 transcription factor and host CRE-like binding factors to activate hr5-dependent transcription. Platform presentation, Annual Meeting of the American Society of Virology, July 2001, Madison, USA.